

WHAT IS CLAIMED IS:

1. A stepping motor, comprising:

exciting coils;

a rotor provided with a plurality of N/S poles so as to rotate following a change
5 of an excitation state of the exciting coils; and

a detecting coil provided separately from the exciting coils so as to generate
induction voltage according to rotation of the rotor.

2. The stepping motor as set forth in claim 1, wherein

10 the exciting coils are provided along a peripheral surface of the rotor, and the
detecting coil is provided at a center of a longest peripheral surface between
adjoining exciting coils.

3. A driving apparatus, comprising:

15 a stepping motor having:

exciting coils,

a rotor provided with a plurality of N/S poles so as to rotate following a
change of an excitation state of the exciting coils, and

a detecting coil provided separately from the exciting coils so as to
20 generate induction voltage according to rotation of the rotor;

a driven member linked with the rotor;

a stopper to mechanically stop the driven member at a predetermined position;

a first exciting means to normally or reversely rotate the rotor by controlling
the excitation state of the exciting coils;

25 a second exciting means to reverse the rotor in a direction of making the driven

member move toward the predetermined position by controlling the excitation state of the exciting coils;

a position detecting means to detect the driven member having abutted the stopper and stopped at the predetermined position on a basis of induction voltage
5 generated in the detecting coil during control by the second exciting means; and

a controlling means which stops the first exciting means controlling and starts the second exciting means controlling when an instruction signal is inputted, and which starts the first exciting means controlling and stops the second exciting means controlling when the position detecting means detects the driven member
10 having stopped at the predetermined position.